

Changes to the LCFS Reporting Tool for Version 2.0 Release

This document highlights the major changes that will be developed and implemented in the LCFS Reporting Tool for release version 2.0. Additional changes that mainly have cosmetic impact are not included in this document. The major changes are in the following areas:

1. High carbon intensity crude oil (HCICO)
2. Business partner and registered biofuel producers
3. Transaction details grid
4. Updates to the XSD

1.0 High Carbon Intensity Crude Oil (HCICO)

Changes to HCICO Design and Location

In the upcoming release, the HCICO data fields will be expanded to allow multiple HCICO fuel pathways for a given CARBOB or Diesel fuel. HCICO data, previously located at the fuel level, will be displayed at the same level as transaction details for both CARBOB and Diesel. The HCICO grid can be activated or deactivated by the user, as needed. Upon activating the HCICO grid, users will be asked to select a HCICO pathway from a dropdown list with a corresponding CI value, and the percentage of HCICO CARBOB/Diesel. Incremental deficit will then be calculated for each corresponding HCICO pathway/percentage combination.

The HCICO grid will contain the following fields:

Field Name	Data Type	Description
HCICO Fuel Pathway	Text (Dropdown)	This field will allow users to select a HCICO pathway. This HCICO pathway will determine the CI value of the HCICO. (The system will contain dummy pathways and CI values until official pathways have been determined).
Percentage HCICO	Numeric value between 1-100	This field indicates the percentage of CARBOB or Diesel that is derived from HCICO. The percentage, calculated against a production volume, will be used to determine the incremental deficit associated with the production of CARBOB or Diesel containing HCICO.
Incremental Deficit	Numeric	This field indicates the Incremental Deficit in metric tons (MT) calculated by the system based on the selected HCICO pathway and corresponding percentage value.

Changes to HCICO Calculations

Previously, the calculation of the incremental deficit was based on production and import volumes of CARBOB. The calculation of the incremental deficit will be changed to CARBOB (or Diesel) production volume only. HCICO calculations will be also applicable to Diesel.

2.0 Business Partners and Registered Biofuel Producers

In version 1.0, the Business Partner grid contained both registered organizations and biofuel producers in the Organization Profile section of the LCFS Reporting Tool. For the upcoming version, three major changes will occur:

- a) The step of associating a business partner to the organization profile will be removed. Users will still be able to view and select any registered organization as a business partner and create a business partner, if needed. For registered biofuel producers, users will be able to view the list of registered biofuel producers but must use the ARB Biofuel Producer Registration process that is external to the LCFS Reporting Tool to add new biofuel producers.
- b) The list of business partners will be separated from the list of registered biofuel producers.
- c) The Business Partner grid will be removed from the Organization Profile section and a new tab containing business partners and biofuel producers will be added.

The Business Partner Master table previously contained all business partners and bio-fuel facilities. In the new release there will be two separate tables, one for business partners and one for registered bio-fuel producers. The business partner table will allow users to view and add new business partners. The registered biofuel producer will be viewable only. The tables will be as follows:

Business Partner Table

Field Name	Data Type	Description
Name	Text	The name of the organization
ID Number	Numeric (9 long)	The FEIN number for the organization
Contact Person	Text	The primary contact of the organization
Address	Alpha-Numeric	A combination of address, city, state, zipcode and country
Phone Number	Numeric Up To 14 long	The phone number for that contact person or the organization
Email	Text with email formatting	The email for that contact person or the organization

Registered Biofuel Producer Table

Field Name	Data Type	Description
Name	Text	Name of the biofuel producer
ID Number	Numeric (9 long)	The EPA 4-digit company code combined with the 5 digit EPA facility number
Address	Text	Combination of address, city, state, zipcode and country
Fuel Pathway Code and Description	Text	The registered fuel pathway code and description for a given facility
Carbon Intensity	Numeric	The registered carbon intensity value for a given facility
Physical Pathway Code and Description	Text	The registered physical pathway(s) for the given facility

3.0 Transaction Details

The transaction detail grid will be modified in response to the feedback received during the testing period. The primary focus of the version 2.0 release is to address several key issues such as how to accommodate data at various levels of aggregation, entering data that contain the same information (which the system may interpret as duplicate but is not), and entering business transactions with intermediate marketers.

New Unique Record Identifier

One of the major changes in the transaction grid is the addition of a Transaction Number to be used as the unique record identifier for a transaction. In version 1.0 of the system, the unique record identifier consisted of three columns (the Invoice Date, Transaction Type, and Business Partner). Due to the inability to add records containing exactly same information, a generic unique identifier called the Transaction Number will be added. The Transaction Number will be created in two ways, based on the method of data entry. In XML upload, users must provide the Transaction Numbers in the xml file. The Transaction Numbers, generated by the organization's accounting or IT system, should be included with the transaction data. In the case of UI-based inputs, the user will have a choice to manually enter a transaction number or have the LCFS Reporting Tool generate a value.

Aggregation and Obligation Indicators

For each report, data will be entered either as an aggregated value or as an individual transaction, depending on the fuel and the corresponding reporting requirements. The aggregation indicator (AI) will be added to the transaction grid for the user to indicate if a reported value has been aggregated.

Previously, three columns were used to indicate whether a fuel amount had positive (+), negative (-) or neutral (o) impact on an organization's overall obligation for a reporting period. In the new release, an obligation indicator (OI) will be added to serve the same functionality but in a consolidated view. Based

on the type of transaction, a (+), (-), or (o) will be displayed to the user in the OI column to indicate how a fuel quantity is accounted for by the system.

Business Partner Field Modification

To accommodate the removal of the business partner association step described previously, the Business Partner field will be modified. Previously, this field contained only a list of business partners and biofuel producers that were associated to the organization. In the upcoming release, the Business Partner field will contain a list of all registered organizations and will be transformed from a dropdown field to a text field with an auto-complete feature. The auto-complete feature will allow the system to provide a list of suggested values based on a user's entry. The Business Partner field will also display the name and the FEIN of the organization instead of just the name. The business partner name and ID will be validated against the master list in the database.

Change Physical Pathway Field Location

The transaction details grid will also include the physical pathway. The physical pathway will be moved from the fuel level to the transaction level where it can be aligned to a specific biofuel producer.

Biofuel Producer Field Addition

A new field dedicated solely to the registered biofuel producers will be added. The new Biofuel Producer field will contain the list of registered biofuel producers. Additional validation will be performed to ensure the biofuel producer's CI value and physical pathway match those in the registration list. In the XML, when a biofuel producer name and ID are entered, the system will validate against the registered list to ensure the corresponding CI and physical pathway entered are valid. In the UI, only biofuel producers for a selected CI value will be displayed. The Biofuel Producer field will also interact with the physical pathway field for a transaction. If a biofuel producer is entered, then the corresponding registered physical pathway will be automatically shown. Users, however, will have the option to change the physical pathway, if there is more than one for a given producer.

(The combination of Business Partner and Biofuel Producer fields can be used to accommodate business transactions either directly with a biofuel producer or through an intermediate marketer. Additional details will be developed to provide guidance on how data can be entered for reporting).

New Transaction Types and Relabeling

New transaction types will be added to accommodate users who may export fuel, report inventory loss, or may wish to exclude fuel amounts that are not used for transportation. Additionally, wording on transaction types for sales and purchases have been changed. See table below.

The Invoice Date will be relabeled to Transaction Date in order to accommodate a variety of transactions. The Transaction Amount will be relabeled to Transaction Quantity to provide better clarity that the number is not a currency value.

In summation the new transaction grid will contain the following fields:

Field Name	Data Type	Description
Transaction Number	Text (primary key)	A unique identifier that is either provided by the user (in XML upload) or manually created or generated by the LCFS RT system (in UI). For XML uploads, the Transaction Number is required for initial import and subsequent updates.
Transaction Date	Date	Date on which a transaction occurred or the end date for which a range of transactions occurred. (If an individual transaction was reported, the Transaction Date is the date on which a transaction occurred. For example, for transactions in which there is a buy or sell (with or without obligation), the Transaction Date is the invoice date. For transactions in which data are aggregated, the date is the end date of the transaction range. For example, if production volumes are reported as an aggregate per quarter, the Transaction Date is the quarter end date).
Transaction Type	Text (Dropdown)	<p>A categorization of the type of transaction that either has positive (+), negative (-) or neutral impact (O) on the overall obligation. Values shown in the dropdown are:</p> <ul style="list-style-type: none"> • Export out of CA distribution system (-) • Import (+) • Loss of inventory (-) • Not used for transportation (-) • Production (+) • Purchased with obligation transfer (+) • Purchased without obligation transfer (o) • Sold with obligation transfer (-) • Sold without obligation transfer (o)
Description	Text	Field to provide additional information about a transaction.
OI (Obligation Indicator)	Checkbox (read-only)	Based on the Transaction Type selected, the Obligation Indicator (OI) will determine how the transaction impacts total obligation. The possible values are: +, -, o. This value is displayed by the

		system and not editable by the user.
Transaction Quantity	Integer	The amount of fuel reported for a given transaction. This corresponds to the fuel volume (in gallons) for liquid fuels or other amounts for non-liquid fuels (in scf, kwh, or kg).
AI (Aggregation Indicator)	Checkbox	A user-specified yes/no response which indicates whether the reported Transaction Quantity is an aggregated number.
Business Partner	Text (Auto-complete)	Field containing the name and FEIN of the business partner. This field validates against the list of registered organizations and will be filtered by an auto-complete feature.
Biofuel Producer	Text (Auto-complete)	Field containing the name and EPA numbers of registered biofuel producers. This field validates against the list of registered biofuel producers and will be filtered by an auto-complete feature.
Physical Pathway Code	Dropdown Box	The physical pathway associated with a transaction. For biofuels, the entry of a registered biofuel producer will automatically populate the physical pathway code.

4.0 XML Schema Changes

At high-level, the XML schema will contain the changes listed below:

- a) The addition of a generic unique record identifier called Transaction Number. The transaction number will be required by the LCFS Reporting Tool upon initial data upload and all subsequent updates. This number must be provided at the time of data import. Since the transaction number will be used to uniquely identify a record, users must ensure the Transaction Number is correctly entered for subsequent correction requests.
- b) Addition of Biofuel Producer, Physical Pathway Code, OI, and AI fields to the transaction grid
- c) Addition of HCICO fuel pathways and corresponding percentages at the transaction level; new fuel pathway codes and dummy CI values for HCICO will be added
- d) Addition of new Transaction Types
- e) Wording change on existing Transaction Types
- f) Relabeling of the Invoice Date to Transaction Date
- g) Using FEIN instead of organization name during import validation. Instead of using the name of the organization, the system will validate against the FEIN upon data import.

Technical details on the changes and an updated XSD file will be provided when available.